WO 2005/013027 PCT/IB2004/051316

5

CLAIMS:

1. Control arrangement for controlling a plurality of Lorenz motors (1, 2) actuating a payload (4), the payload having a center of gravity (12), the control arrangement comprising a controller (8) for receiving height signals  $(z_1, z_2)$  from sensors sensing heights of said payload and for calculating control signals  $(C_1, C_2)$  for said Lorenz motors from said height signals, characterized in that said controller (8) is arranged to calculate from these height signals  $(z_1, z_2)$  at least one angle of rotation of the center of gravity about a horizontal axis and calculate from this at least one angle of rotation said control signals  $(C_1, C_2)$  for said Lorenz motors (1, 2) such that a predetermined rotational stiffness for supporting said payload (4) is achieved.

10

25

5

- 2. Control arrangement according to claim 1, wherein said controller (8) is arranged to control three or four Lorenz motors.
- Method of controlling a plurality of Lorenz motors (1, 2) actuating a
  payload (4), the payload having a center of gravity (12), the method comprising receiving height signals (z<sub>1</sub>, z<sub>2</sub>) from sensors sensing heights of said payload and calculating control signals (C<sub>1</sub>, C<sub>2</sub>) for said Lorenz motors from said height signals, characterized by calculating from these height signals (z<sub>1</sub>, z<sub>2</sub>) at least one angle of rotation of the center of gravity about a horizontal axis and calculating from this at least one angle of rotation said control signals (C<sub>1</sub>,
  C<sub>2</sub>) for said Lorenz motors (1, 2) such that a predetermined rotational stiffness for supporting said payload (4) is achieved.
  - 4. Computer program product comprising instructions and data to be loaded by a computer, and after being loaded allowing the computer to perform the method according to claim 3.
  - Data carrier comprising a computer program product according to claim 4.